STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS

FROM: PATRICK STEFFENSEN AND KRISTEN EDWARDS

RE: EL20-032 - In the Matter of the Petition of Otter Tail Power Company for Approval of the Transmission Cost Recovery Rider Rate

DATE: February 12, 2021

BACKGROUND

On October 30, 2020, the South Dakota Public Utilities Commission (Commission) received a Petition for Approval of the Annual Update to its Transmission Cost Recovery Rider Rate (Petition) from Otter Tail Power Company (Otter Tail or Company) requesting approval of its annual update to its Transmission Cost Recovery Rider (TCR) rates. The proposed revised TCR rates reflect the TCR revenue requirements for March 1, 2021 through February 28, 2022, including the tracker balance estimated for the end of the current period.

SDCL §§ 49-34A-25.1 through 25.4 authorize the Commission to approve a tariff mechanism for the automatic annual adjustment of charges for the jurisdictional costs of new or modified transmission facilities with a design capacity of 34.5 kV or more and which are more than five miles in length.

In Docket EL10-015, the Commission approved the establishment of TCR rates to recover the costs associated with three transmission projects and Midcontinent Independent System Operator (MISO) Schedule 26 expenses. The Commission approved a Settlement Stipulation supporting the “hybrid” or “split method” approach for allocating MISO approved cost-shared projects with company investment. This method was refined in Docket EL12-054. In subsequent years, the Commission approved recovery of additional projects, which were ultimately rolled into base rates in rate case docket EL18-021.

Most recently, in Docket EL19-039, the Commission approved TCR recovery of the 2020 revenue requirement associated with two previously-approved transmission projects (Lake Norden Area Transmission Improvements and Big Stone South to Ellendale), a transmission adjustment from rate case EL18-021, Southwest Power Pool (SPP) Schedule 9 and Schedule 11 expenses, and MISO Schedule 26 and 26A expenses, offset by MISO Schedule 9, Schedule 26 and 26A, and Multi-Value Project (MVP) Auction Revenue Rights (ARR) revenues. The 2020 TCR implemented the following rates for each customer class effective March 1, 2020:

Class	¢/kWh	$/kW
Large General Service	0.214	0.679
Controlled Service	0.117	N/A
Lighting	0.367	N/A
All Other Service	0.704	N/A

In this filing, Otter Tail initially requested to recover a projected March 1, 2021 through February 28, 2022 revenue requirement of $2,174,742 associated with two new projects (Erie to Frazee 115 kV Project and Grant County to Norcross 115 kV Project), the two previously-approved transmission projects, the transmission adjustment from rate case EL18-021, SPP Schedule 9 and Schedule 11 expenses, and MISO Schedule 26 and 26A expenses, offset by MISO Schedule 9, Schedule 26 and 26A, and MVP ARR revenues. The request includes the Company's proposal to return to customers an estimated $220,443 in over-collection of the prior period's remaining balance. The Company's initially proposed March 1, 2021 through February 28, 2022 revenue requirement results in the following rates for the respective customer classes, based on a March 1, 2021, effective date:

Class	¢/kWh	$/kW
Large General Service	0.223	0.668
Controlled Service	0.120	N/A
Lighting	0.414	N/A
All Other Service	0.622	N/A

STAFF'S ANALYSIS AND UPDATES

Staff's recommendation is based on its analysis of Otter Tail's filing, discovery information, relevant statutes, and previous Commission orders. Staff's analysis consisted of review of the new projects, revenue requirement calculation, class allocation, and rate design. Each of these items are discussed below.

REVENUE REQUIREMENT

Staff reviewed the tracker report for the previous period (March 1, 2020 through February 28, 2021), including review of the actual costs to ensure the costs were prudent and at the lowest reasonable cost to ratepayers and the calculation of the under/over collection balance to be incorporated in the new TCR rates. Staff also reviewed the forecasted March 1, 2021 through February 28, 2022 revenue requirement associated with the two new projects, the two previously-approved transmission projects, the transmission adjustment from rate case EL18-021, MISO Schedule 26 and 26A expenses and revenues, SPP Schedule 9 and Schedule 11 expenses, MISO Schedule 9 and MVP ARR revenues, and filing fee expense. Detailed descriptions of each of these cost/revenue categories are contained in Otter Tail's initial Petition in this docket.

Supplemental Filing

Otter Tail and Staff identified updates to be incorporated into the Company's proposed revenue requirement and Otter Tail submitted a Supplemental Filing on January 29, 2021, to reflect these updates. Staff agrees with Otter Tail's updated 2021 revenue requirement of $2,191,853, including an over-collection of $185,648. This represents an increase of approximately $17,000 from Otter Tail's initial Petition filed on October 30, 2020.

The March 1, 2021 through February 28, 2022 TCR is based on estimated costs of eligible transmission projects subject to later "true-up" to reflect the actual costs and actual recoveries. Table 1 on page 4 of Otter Tail's Supplemental Filing provides a comparison of the Company's originally filed revenue requirement to the revised revenue requirement and pages 1 and 2 provide descriptions of the changes made from the initial filing.

Staff agrees with the changes made, and the following paragraphs provide a brief recap of these changes.

Updated Capital Costs, Revenues, Expenses, and Sales

The originally filed TCR was based on actual data through September 2020 and projected activity beginning October 2020. Otter Tail's Supplemental Filing provides an updated report of actual data through December 2020. This includes updates to the capital costs, expenses, and revenues for each project, MISO expenses and revenues, and Otter Tail sales. Otter Tail also updated the MISO forecasts for January 2021 forward. These changes result in an increase to the revenue requirement of approximately $9,000.

Revised Attachment 2 provided with the Company's Supplemental Filing provides a summary of revenue requirements and Revised Attachment 4 summarizes the tracker activity by month. Individual project detail for the two new projects, Erie to Frazee 115 kV Project and Grant County to Norcross 115 kV Project, is found on Revised Attachments 7 and 8, respectfully. Individual project detail for the two previously-approved projects, Lake Norden Area Transmission and Big Stone South to Ellendale MVP, is found on Revised Attachments 5 and 6, respectively. Revised Attachments 9 through 19 provide details regarding the remaining revenue requirement components.

Capital Structure and Cost of Debt

The initial filing used a capital structure and cost of debt as of December 31, 2019, to calculate the 2021 revenue requirements. Otter Tail updated its 2021 revenue requirement calculation to include a December 31, 2020, capital structure and cost of debt. This update increases the revenue requirement by approximately $8,000.

NEW TRANSMISSION PROJECTS

Otter Tail asks approval of TCR recovery of two new projects, the Erie to Frazee 115 kV project and the Grant County to Norcross 115 kV project. The revenue requirements associated with these projects are found on Revised Attachments 7 and 8, and the following sections provide an analysis of each project.

<u>Erie to Frazee 115 kV Project</u>

Otter Tail has been involved in a transmission system planning study with Missouri River Energy Services (MRES), Great River Energy (GRE), and Minnkota Power Cooperative (MPC) to identify necessary system reinforcements to the high voltage transmission system in west central Minnesota. Otter Tail has identified this need for system reinforcements to the high voltage system primarily due to load growth in the area, but also with consideration of the pending retirement of the Hoot Lake generation plant. This study ultimately determined that the transmission system is unable to meet the voltage and loading criteria in the Frazee and Fergus Falls areas when there is an outage of the 230 kV source at Audubon.

After an analysis of several alternatives to mitigate these issues, the Erie to Frazee 115 kV Project was chosen, as it could serve higher amounts of load in summer and winter peaks, has the highest amount of transfer capability with the least amount of system limitations, and is the lowest reasonable cost when considering the supplemental projects required with the various alternatives. The parties coordinated the project with MISO, and it was approved as part of MISO's 2019 Transmission Expansion Plan (MTEP19).

Otter Tail has explained in its filing that Otter Tail will build and own the new Erie Substation while GRE will build and own the nine miles of new 115 kV line as well as expand and add capacitor banks at the existing Frazee Substation. Staff would note that while Otter Tail's portion of the project involves building and owning the Erie Substation, SDCL 49-34A-25.1 provides a tariff mechanism for transmission facilities and associated facilities. The Erie Substation includes associated facilities that are not a stand-alone project, but rather associated facilities that are components of the Erie to Frazee 115 kV Project, and all the project components are necessary for the project to provide system benefits. Furthermore, the costs of all the components of the project do in a sense get shared by all parties through rates established under MISO's Open Access Transmission Tariff (OATT). Thus, Staff believes this project does fit with the intent of the law and would recommend its inclusion in the TCR.

Grant County to Norcross 115 kV Project

Otter Tail has also been involved in planning studies to address recent load growth concerning the high voltage sources at Elbow Lake, Fergus Falls, and Morris, Minnesota. These studies have shown that the existing system can marginally meet Otter Tail's voltage criteria during system intact conditions, but an outage of the Elbow Lake 115 kV source results in low voltage concerns that are below criteria.

After an analysis of several alternatives, the Grant County to Norcross 115 kV Project was chosen as the best alternative to mitigate the present issues since it not only has the highest amount of load serving capability during contingency events, but also outperforms other alternatives. Additionally, this is the lowest reasonable cost when considering the supplemental projects required with the various alternatives. Otter Tail coordinated the project with MISO, and it was also approved as part of MTEP19.

Otter Tail has explained in its filing that Otter Tail will build and own seven miles of new 115 kV line and the new Norcross Substation, while MRES will expand the existing Grant County Switching Station. Otter Tail and MRES are coordinating their efforts for this project, and Otter Tail is leading the project development efforts.

PROJECT COST SHARING

Otter Tail's TCR continues to apply the refined split methodology approved in Docket EL12-054 for projects cost-shared in MISO. Previous Staff Memorandums, including the memorandum filed in Docket

EL12-054, provide a detailed description of the methodology. Should the Commission desire a review of this methodology, a synopsis can be found on pages 5 and 6 of the Staff Memorandum filed in Docket EL16-035[1].

Staff further notes that SPP Schedule 11 expenses are similar to MISO Schedule 26 and 26A expenses, but an analysis of the applicability of a refined split method does not apply because OTP does not have any transmission investments in the SPP system and therefore Otter Tail is only allocated expenses.

SPP Schedule 9 Expense and MISO Schedule 9 Revenue

As discussed in prior Otter Tail TCR dockets, in 1958, Central Power Electric Cooperative, Inc. (CPEC) and Otter Tail entered into an Integrated Transmission Agreement to jointly plan, develop, and construct transmission facilities. This required the two parties to contribute equally to the construction of new facilities in the Integrated Transmission System (ITS) and resulted in facility ownership being non-contiguous.

Effective January 1, 2016, CPEC placed some of its facilities, including facilities in the ITS, under the SPP tariff. As a result, certain parts of the Otter Tail transmission system and Otter Tail native load are now isolated from direct integration into the MISO system, leaving Otter Tail dependent on SPP transmission service in order to serve Otter Tail load. This has subjected Otter Tail to Schedule 9 of SPP's tariff to obtain Network Integration Transmission Service (NITS). Under NITS, Otter Tail and its customers receive the highest level of curtailment priority on CPEC's facilities. This firm service is comparable to the service CPEC has obtained on these facilities to reliably serve their native customers.

Similar to Otter Tail paying for use of CPEC's system in SPP, CPEC needs to pay for their use of Otter Tail's system in MISO. This was also effective January 1, 2016 and flows through to Otter Tail and its customers as a revenue under MISO's Schedule 9. As provided in the Supplemental Filing, when MISO's Schedule 9 revenue is netted against SPP's Schedule 9 expense, it increases the revenue requirement by $89,507.

Otter Tail has indicated that it continues to take any necessary actions to reduce SPP expenses and gain more long-term certainty of the existing interconnections with CPEC in the future. These cost reduction efforts have primarily included building new facilities to avoid using CPEC facilities and obtaining SPP 30.9 facility credits. Otter Tail will continue exploring these and other opportunities to reduce SPP expenses in the future and will continue providing updated information in future filings.

MISO ROE Complaints at the FERC

As explained in the initial and supplemental filings, Otter Tail continues to monitor the impacts of the MISO return on equity (ROE) complaints at the Federal Energy Regulatory Commission (FERC), and the adjustments will be included in the annual update filings. MISO began processing the refund for the first complaint period (November 2013 to February 2015) in April 2020. Thus, Otter Tail includes the impacts

[1] http://www.puc.sd.gov/commission/dockets/electric/2016/el16-035/memo.pdf

of the refund within this filing, resulting in an approximate $48,000 decrease to the 2021 revenue requirement.

CLASS ALLOCATION AND RATE DESIGN

The TCR incorporates the class allocation and rate design methodology approved in rate case EL18-021. The revenue requirement is allocated to four customer classes based on the transmission demand allocation factor, D2, from Otter Tail's rate case EL18-021. Rates for each customer class are then designed based on forecasted sales for the time period rates will be in effect. Projected sales for each class are created by econometric models using various inputs such as weather data, economic data, customer counts, and historical usage. The large general service class rate design incorporates both a demand charge and an energy charge while the remaining retail rate classes have an energy rate only.

In Docket EL18-048, Otter Tail agreed to track revenue requirements, billings, and the resulting over- or under-recovery by rate class, as opposed to the prior way of tracking at the total revenue requirement and total billings level. This change began in EL19-039 and ensures that TCR true-ups will accurately reflect the class allocations as determined in rate case EL18-021 and minimize cross-class subsidization in the future. The Supplemental Filing tracks revenue requirements and billings by class to obtain class-specific over- and under-recoveries as shown on Revised Attachment 4A.

REASONABLENESS OF OVERALL EARNINGS FROM REGULATED RATES

As established per settlement stipulations in prior TCR dockets, the Company agrees to continue to file, by June 1 of each year, an annual report with the Commission detailing its South Dakota jurisdictional earnings for the preceding calendar year. Staff believes the report is necessary to monitor the Company's earnings and the potential effect of adding the TCR to its South Dakota tariff.

RECOMMENDATION

Staff recommends the Commission approve the $2,191,853 revenue requirement for the March 1, 2021 through February 28, 2022 plan year, with the following rates to be effective March 1, 2021:

Class	¢/kWh	$/kW
Large General Service	0.229	0.686
Controlled Service	0.120	N/A
Lighting	0.421	N/A
All Other Service	0.618	N/A